ERCB Energy Resources Conservation Board

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Directive 047

Revised edition February 13, 2009
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Waste Reporting Requirements for Oilfield Waste Management Facilities

The Alberta Energy Resources Conservation Board (ERCB/Board) has approved this directive on February 13, 2009. The requirements in this directive come into effect April 1, 2009.

Dan McFadyen
Chairman

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1   Introduction

1.1   Background

The *Oil and Gas Conservation Regulations (OGCR)* state that the management of oilfield waste must be conducted in accordance with the requirements in *Directive 058: Oilfield Waste Management Requirements for the Upstream Petroleum Industry*, which requires approval holders of specific types of oilfield waste management facilities (OWMF) to complete and submit the S-25 Monthly Oilfield Waste Management Facility Statement (S-25 Statement). *Directive 047: Reporting Requirements for the S-25 Monthly Oilfield Waste Management Facility Statement* was first issued in 2006 and details the requirements for reporting using the S-25 Statement. The Energy Resources Conservation Board (ERCB) has worked with the Petroleum Registry of Alberta (Registry) and industry to migrate the information reported using the paper S-25 Statement to an on-line electronic format through the Registry.

Effective April 1, 2009, this revised edition of *Directive 047* changes the requirements set out in *Directive 058* regarding use of the S-25 Statement for reporting and supersedes the 2006 edition of *Directive 047*. It also supersedes the conditions set out in OWMF approvals directing use of the S-25 Statement for monthly reporting.

OWMFs treat, process, store, recycle, and/or dispose oilfield waste generated by the upstream petroleum industry. Some OWMFs are approved to receive specific non-oilfield wastes. Commencing April 1, 2009, OWMF approval holders must report the monthly waste information to the Registry (http://www.petroleumregistry.gov.ab.ca/) electronically using on-line screens or batch upload files (i.e., CSV or XML) to fill out the Waste Plant Submission. This will replace the reporting previously done on the paper S-25 Statement. **Therefore, the waste reporting information for March 2009 and each subsequent month thereafter must be submitted to the Registry**.

OWMFs must have an approval to operate, in accordance with Section 39(1)(g) of the *Oil and Gas Conservation Act* and *Directive 058*. The types of OWMFs required to report monthly waste information using the S-25 Statement and commencing with the March 2009 waste reporting period using the electronic Waste Plant Submission include

- oilfield waste processing facilities,
- surface facilities associated with a standalone class 1a or class 1b disposal well,

- oilfield waste caverns, and

- other OWMFs as required by the ERCB approval to operate.

The reporting requirements for other types of OWMFs (e.g., transfer stations, storage facilities, landfills, biodegradation facilities) are detailed in *Directive 058*. For those OWMFs that have multiple waste management activities (i.e., the types of OWMFs listed above) occurring on its site, the reporting requirements specified for each waste management activity (i.e., type of OWMF) must be followed. For example, an approval holder of an OWMF that conducts waste transfer and waste processing activities must follow the reporting requirements in *Directive 058* for the waste transfer activity and the reporting requirements in this directive for the waste processing activity.

See Appendix 1 for a glossary of abbreviations and terminology used in this directive.

1.2 Intent of the Waste Plant Submission

The Waste Plant Submission provides a means for approval holders of OWMFs to report receipts and dispositions of oilfield waste and non-oilfield waste to the ERCB in a format that allows the ERCB to track and monitor the receipt, processing, and disposition of oilfield and non-oilfield wastes. It also allows the ERCB to track and monitor the disposition of by-products, including recovered oil, and residuals generated by an OWMF's process to ERCB- and non-ERCB-regulated facilities. Reporting the wastes by waste codes specified by the ERCB and by oil, water, and solids composition of the wastes in cubic metres (m^3) remains unchanged, but the option to report receipts and dispositions in tonnes is no longer available.

1.3 What's New in *Directive 047*

This edition of *Directive 047* details the reporting requirements for OWMFs that must electronically (i.e., using on-line screens or batch upload using CSV or XML files) submit monthly waste information to the Registry using the Waste Plant Submission. (Contact the Registry Service Desk for supporting documents.) See Appendix 2 for an example of the Waste Plant Submission format.

The information submitted through the Waste Plant Submission will auto-populate to other Registry facilities, which did not occur with the S-25 Statement. Therefore, valid ID locations, facility and well ID codes, BA codes, and waste codes must be used for successful acceptance of a Waste Plant Submission by the Registry. See Appendix 3 for an up-to-date list of ERCB waste codes.

For the transition of waste reporting to the Registry, the March 2009 opening inventory for each OWMF will be populated using February 2009 closing inventories from S-25 Statements received at the ERCB by March 18, 2009. If changes are required to the March 2009 opening inventory, the OWMF approval holder will be required to balance the facility using the inventory adjustment activity; for more details regarding adjustments, see Section 7: Opening and Closing Inventories and Adjustments for Oilfield Waste Management Facilities.

This edition of *Directive 047* does not contain the direction set out in the 2006 edition in its Section 3: Surface Facilities Associated with Standalone Class Ia and Ib Disposal Wells Receiving Waste Fluids and/or Produced Water. These types of OWMFs must now report to the Registry, and the receipt of produced water must be documented on the Waste Plant Submission for the surface facility.

This edition of *Directive 047* changes the direction set out in the 2006 edition in its Section 4: Oilfield Waste Cavern Reporting Requirements. Surface infrastructures associated with caverns are typically approved as waste processing facilities. The surface infrastructure and each cavern receiving wastes from the surface infrastructure must all have valid waste plant facility ID codes. Approval holders of OWMFs that consist of surface infrastructures and caverns must have all necessary waste plant facility ID codes in place for the February 2009 reporting period (i.e., S-25 Statements for February 2009 must be completed and submitted for the surface infrastructure and each associated cavern). Facility ID codes are obtained from the Registry. In addition, transfer of all materials between the surface infrastructures and associated caverns, including displaced brine from the cavern, must be reported as receipts or dispositions, as appropriate. (See Section 4: Oilfield Waste Receipts and Dispositions for more details.)

1.4   Requirements, Enforcement, and Expectations

The ERCB regulatory requirements are those rules that an approval holder/licensee has a legal obligation to meet and against which the ERCB may take enforcement action in cases of noncompliance. ERCB requirements and recommendations are numbered sequentially throughout *Directive 047*. "Must" indicates a requirement, while "expects," "should," "recommends," and "is encouraged" indicate a recommended practice or guideline that is not subject to enforcement action but that should be given consideration by the licensee or approval holder.

During audits, inspections, and investigations, noncompliances with *Directive 047* are recorded and tracked in the ERCB inspection and audit compliance categories.

- Oilfield waste management facility inspections evaluate facilities' compliance with *Directive 063: Requirements and Procedures for Oilfield Waste Management Facilities.*

- Oilfield waste receiver audits evaluate facilities' compliance with *Directive 058, Interim Directive (ID) 2000-03: Harmonization of Waste Management, ID 2000-04: An Update to the Requirements for the Appropriate Management of Oilfield Wastes, ID 99-04: Deposition of Oilfield Waste into Landfills, Directive 058—Addendum: Oilfield Waste Management Facility Approvals—Notification and Amendment Procedures, Directive 055: Storage Requirements for the Upstream Petroleum Industry, Directive 051: Injection and Disposal Well—Well Classifications, Completions, Logging, and Testing Requirements.*

The ERCB enforcement process is detailed in *Directive 019: ERCB Compliance Assurance— Enforcement*. A list of risk-based noncompliances is available on the ERCB Web site at www.ercb.ca under Industry Zone : Compliance and Enforcement : Risk Assessed Noncompliance. Failure to complete the Waste Plant Submission in accordance with this directive will result in ERCB enforcement action in accordance with *Directive 019*.

To address the costs and quality issues caused by late submissions and data discrepancies in reporting, the ERCB has a schedule of fees set out in the *Oil and Gas Conservation Regulations*, Part 17, Schedule of Fees. (See Section 10: Noncompliances and Penalties for additional details.) A shadow billing period will be introduced prior to implementation of the schedule of fees. Information respecting the fees and shadow billing will be provided later.

1.5　Effective Dates

1) For the transition of waste reporting to the Registry, OWMF approval holders must

   a) ensure that valid waste plant facility ID codes are in place and used in the February 2009 S-25 Statement, and

   b) submit to the ERCB by March 18, 2009, a completed S-25 Statement for the month of February 2009.

2) Commencing with waste reporting for March 2009 and each month thereafter, an OWMF approval holder of an active OWMF that during the preceding month had activities or was shut in for the entire month must

   a) complete the monthly Waste Plant Submission and submit it to the Registry by deadlines published in the Registry Reporting Calendar on the Bulletin Board available on the Registry Web site (http://www.petroleumregistry.gov.ab.ca). This is approximately the 20th day of the month (note that the March 2009 waste plant submission must be submitted by April 21, 2009); and

   b) retain copies of the final Waste Plant Submission for each month for a minimum of 5 years. Supporting data and records (e.g., truck tickets, log books, analytical data) must also be retained for a minimum of 5 years. These records must be available to ERCB staff upon request.

2　Petroleum Registry of Alberta

The Registry is a shared, interactive, secure database accessed though the Internet. It facilitates the exchange of data among upstream oil and gas industry partners and among industry and the Alberta Ministry of Energy. As a central source of volumetric data, the Registry's Web-based interface provides users with on-line access to information. The data submitted to the Registry are subject to system controls and front-end editing procedures before they are finally posted to the Registry. Front-end editing immediately identifies discrepancies for the submitting approval holder so that corrections can be made before final posting is done to the Registry.

Each approval holder has its own method for submitting data to the Registry, which is controlled through the approval holder user security administrator (USA). (Contact the Registry Service Desk for supporting documents.)

2.1　Security and Validation

Only the approval holder of the OWMF may submit waste plant data to the Registry for the given production month (reporting month). It is the approval holder's responsibility to ensure that access to submit data for a specific facility is assigned to the appropriate company representative (e.g., production accountant).

When there is a change in ownership of an OWMF, the current approval holder may choose to give the new approval holder authority to submit prior period amendments on its behalf; the approval holder of the Waste Plant Submission records remains the original approval holder, who is responsible for all submissions for the periods when it was in operation regardless of who submit the amendments.

Only the approval holder or person who has been given authorized access to the Registry has the ability to query or run its own report for the Waste Plant Submission.

Once all information is entered either using on-line screens or batch upload files (i.e., CSV, XML), the Registry system conducts validation of the data. Contact the Registry Service Desk for supporting documents and further information on the validation process.

2.2 Methods of Submission

There are two methods for electronically submitting data to the Registry:

- directly updating data on line using defined screens and processes, or
- batch uploading using defined electronic formats.

On-line updating is used primarily by an approval holder who has only a few transactions per month.

Batch loading of waste plant data allows an approval holder to send data electronically through the Web to the Registry. This option is used by an approval holder who has production accounting systems or who manages its waste plant accounting by spreadsheet.

Operators are not restricted to using only one method; they may submit data using a batch process and then correct or amend the data using the on-line process, or vice versa.

Upon receipt of each submission, the Registry runs computerized edit checks to ensure data quality and completeness. This edit first checks that the data submitted are valid for acceptance by the Registry:

- that the person submitting the data is authorized to submit the waste plant data;
- that the facility IDs are correct according to ERCB and Registry records; and
- that activities and waste codes are valid.

If the submitted data do not pass one of the checks, the data are not accepted, and the approval holder must correct and resubmit the data.

2.3 Submitting Amendments or Corrections

Submissions of amendments or corrections are "full facility" submissions. This means that each submission made for an OWMF completely overrides the previous submission. However, during the current month the approval holder may still submit partial data for an OWMF, but each time the approval holder submits any data for an OWMF and production month (or reporting month), it must submit the previous partial data along with the new data.

The Registry assigns a sequential amendment number each time waste plant data for an OWMF are submitted; the number increases by one for each amendment. When an approval holder amends waste plant data on line, the Registry displays the last version, to which the approval holder may add, change, or delete data. Then when the approval holder submits its changes, the Registry creates an amendment that includes any unchanged data from the previous version, along with the changes made. The submission with the highest amendment number is always deemed to be the most current version for the facility. All data for a facility for the current production month must be submitted by the ERCB filing deadline.

To avoid discrepancies between the Registry and an approval holder's system, it is recommended that any amendment or correction be changed within the approval holder's production accounting system and then updated to the Registry. This will ensure that the Registry's waste plant information is the same as the approval holder's records.

If information is reported that should not have been included when an amendment is submitted, the approval holder may exclude the data reported in error through an amended submission.

- For example, if an incorrect facility ID was entered in "From/to," the amendment should report only the correct facility ID and not include the incorrect facility ID. The removal of the incorrect facility ID will automatically delete any data entered at the incorrect delivering facility.

For further details, see Appendix 4 for the types of errors.

2.4 Notifications

If any problems are encountered with either on-line or batch submissions, the Registry will notify the operator. For on-line submissions, an error message is displayed immediately, and the on-line errors can be corrected right away before leaving the edit screens.

For batch submissions, the Registry sends an e-mail notification to the operator of record for a facility advising it of the results of each batch submission and of any errors detected. Each approval holder may decide within its company the appropriate person to receive these notices and when the notices should be received. How an approval holder chooses to manage these e-mail notifications depends upon how it sets the notifications options. A copy of each notification is kept in the operator's Registry in-box for a period of 90 days.

2.5 Registry In-Box

The Registry in-box assures that all notifications are available to approval holders for 90 days. Each approval holder must confirm that all notices of errors or missing data are acted upon prior to the ERCB filing deadline to avoid waste plant noncompliance fees.

3 Waste Plant Submission

3) Waste plant data are transaction based, which means that each transaction for an OWMF must identify the From/To, the Activity, the Waste Code, the classification (dangerous/hazardous or non-dangerous/non-hazardous), and the composition (oil, water, solid, and gas or a combination thereof). Each OWMF has its own method for submitting waste plant data to the Registry, which is controlled through the OWMF's user security administrator (USA) (see the Registry Training and Performance Support System on-line-training module in the Registry). See Appendix 5 and 6 for screen examples of the Waste Plant Submission and Appendix 3 for a list of waste codes.

4) The facility ID and production month must be recorded in the initial screen prompt. The production month will default to the current production month, and the Registry will auto-populate the corresponding OWMF name and location. The Registry will also display appropriate screens and any inventory data from the previous month.

3.1 Inventory

If an OWMF had closing inventory [INVCL] from the previous month, the OWMF's opening inventory [INVOP] for the current month will be auto-populated for the OWMF approval holder. At the ERCB filing deadline, the Registry will roll over all closing inventory [INVCL] volumes to the next month's opening inventory [INVOP], ready for the next month's waste plant submission. In fact, the approval holder will never be able to enter the

opening inventory activity, nor will it be able to change a volume that was auto-populated by the Registry.

5) When an approval holder amends a previous month and changes the closing inventory volume [INVCL], the Registry auto-populates a pending waste plant submission, changing the opening inventory [INVOP] volume for the subsequent month. The approval holder must also submit an amendment for that month. (See Section 7 for additional opening inventory, closing inventory, and adjustment information.)

6) If an OWMF has an opening inventory and the facility does not have any activity for the month, the opening inventory volumes must be entered as the closing inventory.

7) If an OWMF is "active" and there are no receipts, dispositions, or inventory to be reported for the month, the approval holder must report a SHUTIN activity.

3.2   Receipts, Dispositions, and Auto-population

8) Except for gas, materials received at an OWMF must be reported as receipts [REC] on the Waste Plant Submission for the OWMF.

If the facility that delivered the material to the OWMF is ERCB-regulated, the Registry will auto-populate a corresponding disposition to that facility's volumetric report. When an OWMF delivers material to another OWMF, the Registry will auto-populate the disposition on the Waste Plant Submission of the delivering OWMF from the receipts reported by the receiving OWMF. The Registry will auto-populate the receipt of gas at an OWMF from the disposition reported by the facility that delivered the gas.

9) Materials delivered from an OWMF must be reported as dispositions [DISP] on the Waste Plant Submission for the OWMF, with the exception of delivery to a custom treating facility (CT), pipeline (PL), or terminal(TM).

When an OWMF delivers to a CT, PL, or TM, the Registry will auto-populate the disposition for the OWMF from the reported receipts for the CT, PL, or TM. When an OWMF delivers material to an injection facility for a disposal well, the Registry will auto-populate the receipt of materials at the injection facility for the disposal well from the reported disposition for the OWMF.

See Figure 1 for additional auto-population scenarios.

Figure 1. Possible auto-population scenarios for a Waste Plant Submission by ABWP0001234

The Registry will flag the facility as pending when it auto-populates the disposition or receipt volumes. This pending transaction is not part of a submission until the approval holder "accepts" the pending disposition or receipt, even if the approval holder has completed its submission and is only waiting for the auto-populated volumes.

10) An OWMF approval holder must ensure that the auto-populated volumes are accepted and become part of its facility submission.

An OWMF cannot modify volumes that have been auto-populated based on another facility operator's submission.

11) If an OWMF approval holder disagrees with a volume, it must contact the receiving or disposing facility operator that created the auto-populated volume and request a correction of the volume.

See Appendix 7 for further details on auto-population rules.

3.3 OWMF Balancing

The Registry runs a system process that balances the facility, calculates activities (e.g., [REC], [DISP]), and totals individual activities. When an approval holder submits an OWMF query or a batch or on-line Waste Plant Submission, the Registry system automatically runs the process to ensure that the current balances are maintained. If any balancing issues arise, the approval holder will receive an on-line notification. Approval holders may request that this report be run on specific facilities or all facilities under its authority.

The Registry will automatically run an ERCB noncompliance error report on all facilities at the filing deadline. The approval holder should request an ERCB Waste Plant Non-Compliance Report for any facility for which it submits data prior to the submission deadline.

Imbalance = total {([INVOP] + [REC]) − ([DISP] + [INVCL]) + [INVADJ]}

The ERCB recommends that the approval holder request a Waste Plant Non-Compliance Report in order to avoid any waste plant noncompliance fee.

3.4 Summary View Screen

The summary view screen displays the summarized activities (e.g., [REC], [DISP]) and the balancing activities for each product group (i.e., oil, water, and, solid). Only one product group displays at a time. See Appendix 8 for an example of a summary view screen. To view a different product, select it from the product group drop-down menu. As the summary screen is the result of summarized and calculated activities for each product, data cannot be entered here.

12) To change any values on this screen, the approval holder must change the facility details used in the calculations.

The approval holder will see the balancing activity [IMBAL] within the summary view screen. These activities are calculated based on the products (i.e., oil, water, and solid) and activities (e.g., receipts and dispositions) reported at the OWMF. The Registry will also compare the total volume of each specific product (i.e., oil, water, or solid) received [REC] and total adjustment [INVADJ] reported for each. If the total [INVADJ] is greater than 10 per cent of the total [REC] for a product, an error message is displayed in the ERCB Waste Non-compliance Report.

4 Oilfield Waste Receipts and Dispositions

13) In order for the Waste Plant Submission to be considered complete, OWMF approval holders must ensure that it contains the waste receipts [REC] (oilfield and non-oilfield) and dispositions [DISP] (to ERCB- and non-ERCB-regulated facilities) information identified below. The information may be submitted by using on-line screens or batch upload files, by auto-population from the Registry, or by a combination thereof.

a) **From/To**: for a receipt [REC], the facility ID of the site that generated the oilfield waste being received must be included. It must be a valid facility ID from the Registry (i.e., BT, CT, GS, GP, IF, OS, PL, TM, WP, RF, and WS) or unlinked well ID (i.e., WI). For a disposition [DISP], the facility ID to which the material is being delivered must be included and be a valid facility ID from the Registry (e.g., CT, TM, WP, IF, PL).

A Waste Location ID must be created through the Registry to report the receipt of non-oilfield waste or disposition to a non-ERCB-regulated facility (see Section 6).

b) **Activity**: the receipt of oilfield and non-oilfield waste must be recorded as [REC] and disposition of oilfield waste must be recorded as [DISP]. Refer to the auto-population table in Appendix 7 for details or see Figure 1 in Section 3.2.

c) **Waste Code**: the appropriate waste code for the oilfield waste being received must be reported and it must be consistent with that set out in the approval for the OWMF. (See Appendix 3 for a complete listing of the ERCB waste codes based on *Directive 058*.)

The waste code [NONOFD] must be used to report the receipt of non-oilfield waste.

- The receipt of non-oilfield wastes must be authorized by the approval for the OWMF, and only the specific types of non-oilfield wastes listed in the approval can be received at an OWMF. As set out in *ID 2000-03*, non-oilfield wastes, which include imported exploration and production wastes, received at an OWMF must contain a recyclable/recoverable component.

[WASTE] must be used to report dispositions of either water or solid from the OWMF. For dispositions of oil, the waste code column must be left blank.

To be eligible to market a by-product (or manufactured material) generated from processing wastes at an OWMF, the OWMF approval holder must have an ERCB-approved Material Safety Data Sheet (MSDS) for the by-product. Dispositions [DISP] of the by-product must be documented on the Waste Plant Submission following reporting requirements in this directive, but using [MNFCTR] as the waste code. A Waste Location (WL) ID must be created when reporting [DISP] of [MNFCTR].

Note that [WSTMIS] is a recognized ERCB waste code, but OWMF approval holders must use the most appropriate waste code for the material being accepted. Use of [WSTMIS] may be subject to audit. The approval holder must also use appropriate waste codes for fluids being accepted for management (e.g., [WATER], [FSHWTR], [BRKWTR]) and/or accepted for processing of previously received wastes/materials. The appropriate waste codes for the disposition [DISP] of materials must also be used.

d) **N/D**: the receipt of oilfield and non-oilfield waste must be identified as either (D) for dangerous oilfield waste/hazardous non-oilfield waste or (N) for non-dangerous

oilfield waste/hazardous non-oilfield waste based, on the classification of the material received. (See *ID 2000-03* and Section 5 of *Directive 058*.)

- The inclusion of (D) or (N) is not required for the disposition of material from the OWMF, but the OWMF approval holder must document the classification of the material being shipped and provide the documentation to the ERCB when requested.

e) **Oil, Water, Solids**: the combined waste composition must be identified for receipts [REC] and dispositions [DISP] as total volumes of oil, water, and solids in cubic metres (m^3) rounded to one decimal place. See the auto-population table in Appendix 7 or Figure 1 for details.

   For the receipt or disposition of multiple shipments of the same waste/material from the same generating/receiving location in one production month, enter the sum of the volumes of oil, water, and solids in cubic metres (m^3) rounded to one decimal place in the Oil, Water, and Solids columns.

f) The receipt of produced water [WATER] must be reported as a receipt on the Waste Plant Submission for the OWMF. The OWMF must have a dedicated tank for the collection of produced water [WATER] in order for it to be acceptable for disposition to a class II disposal well (i.e., produced water must not be commingled with other fluids/waste). If the produced water [WATER] is not received into a dedicated tank (i.e., produced water is commingled with other fluids/waste) it must then be recorded as a disposition of [WASTE]. If the produced water is comingled with other fluids then the comingled fluids must be sent to a class Ia or Ib disposal well.

g) The closing fluid inventories (combined volumes of waste fluid and produced water) are recorded in the Water column section of the Waste Plant Submission as a single entry.

5   Reporting Fuel Consumption at OWMFs

14) To report the fuel consumed at OWMFs, the following information must be recorded in the lower portion of the Waste Plant Submission:

a) **From/To**: this field must be left blank.

b) **Activity**: [FUEL] must be reported to document the consumption of gas as fuel. (See Appendix 9 for a list of activity types.)

c) **Gas**: the volume consumed as fuel, in thousands of cubic metres ($10^3\,m^3$) rounded to one decimal place, must be reported in the Gas column.

6   Creation of a Waste Location ID

15) Prior to entering the receipt of a non-oilfield waste or the disposition of material to a non-ERCB-regulated waste management facility, the OWMF approval holder must look up or create a Waste Location ID. (See Appendix 10 for an example of the information required.) A look-up list of Waste Location IDs is available on the Registry, and new ones that are created will be added to the list.

16) The OWMF approval holder must enter the information outlined below into the Waste Location ID form in order to create a unique Waste Location ID.

a) **Name**: enter the name of the non-oilfield waste generator or the non-ERCB-regulated facility that is to receive the OWMF's disposition.

b) **Description**: select a description of the generating location from a dropdown list (e.g., gas/service station) or non-ERCB-regulated facility. (See Appendix 11 for a list of descriptions.)

c) **Approval Number**: enter the approval number of the generating location if one exists (e.g., Alberta Environment Approval or registration number) or the approval number for the non-ERCB-regulated facility.

d) **Location (AB or Non AB)**: enter the location of the generating location or the non-ERCB-regulated waste management facility. If the location of the generating site is in Alberta, the Alberta Township System (ATS), variant of the Dominion Land Survey (DLS) system, must be used. For non-Alberta generating locations, complete the space provided. The location entered must be the generating location, not the company's main office location or the disposition location for the non-ERCB-regulated facility.

e) **Address**: enter the street address of the generating location or the non-ERCB-regulated facility.

f) **City**: enter the city or town in which the generating location is located or the non-ERCB-regulated facility.

g) **Province**: enter the province in which the generating location is located or the non-ERCB-regulated facility.

h) **Postal Code**: enter the postal code of the generating location or the non-ERCB-regulated facility.

17) When the Waste Location ID form is completed, a Waste Location ID Confirmation (see Appendix 12) is generated with a unique number (e.g., ABWL0000123) for the specific non-oilfield generating location or the non-ERCB-regulated facility that is to receive the OWMF's disposition. This Waste Location ID must be used for the specific non-oilfield waste generating location or the non-ERCB-regulated facility that is to receive the OWMF's disposition; it should also be used for subsequent receipts from and dispositions to the same location.

7 Opening and Closing Inventories and Adjustments for Oilfield Waste Management Facilities

18) The information submitted on the Waste Plant Submission to the Registry provides the ability to query the amount of oil, water, and solid recorded for the production month. To allow calculation of this information for the reporting facility, the OWMF approval holder must report information set out below.

a) The monthly Closing Inventory [INVCL] for oil, water, and solids must be manually recorded in one Activity row on the Waste Plant Submission.

- The [INVCL] for each product (i.e., oil, water, or solid) auto-populates to the following reporting month as the [INVOP].

- The monthly summary of Total Receipts [REC] and Total Dispositions [DISP] is calculated and displayed for each of oil, water, and solids in the Summary View of the Waste Plant Submission screen in the Registry (see Appendix 8 for an example).

b) In order to correct an [INVOP] due to adjustments, the OWMF approval holder must make a change to the prior month's [INVCL]. This can be done by amending the specific row of the previous month's Waste Plant Submission.

c) Adjustments [INVADJ] are used to account for errors due to shrinkage or errors in volume determinations. If the receipts are greater than the disposition for a product group (i.e., oil, water, or solid), the adjustment must be positive; if the receipts are less than the disposition for a product group (i.e., oil, water, or solid), the adjustment must be negative. Adjustments are calculated as follows for one month:

Adjustment = (Total Receipts + Opening Inventory) - (Total Dispositions + Closing Inventory)

- If an adjustment is not made for a product group (i.e., oil, water, or solid), it will show an imbalance [IMBAL] in the Summary View. See Appendix 8 for an example.

- An explanation is not required for an adjustment. However, there is an associated noncompliance associated with it. See Section 6 for further details.

8   Oilfield Waste Cavern Reporting Requirements

Oilfield waste caverns have surface infrastructures that are used to receive and prepare or slurry the waste for injection into the cavern, as well as to receive materials coming out of the cavern (e.g., displaced brine or recovered oil).

19) The surface infrastructure, which is typically approved as a waste processing facility, as well as each cavern receiving waste from the surface infrastructure must have a waste plant facility ID code (i.e., ABWP0000123).

20) Approval holders of OWMFs that consist of oilfield waste caverns and associated surface infrastructure must complete and submit monthly Waste Plant Submissions following the requirements set out in Section 4.

21) All transfers of materials between the surface infrastructure and associated caverns must be documented as receipts and dispositions (as appropriate) based on the actual operations at the OWMF. This includes documenting the transfer of cavern brine between the surface infrastructure and cavern. Reported dispositions must correspond to the actual part of the facility from which the material was delivered. For example, oil recovered from a cavern is typically stored in tanks that are part of the surface infrastructure, and then the oil is transferred from the tanks to another facility or pipeline. The reporting must reflect that the oil recovered from the cavern was received at the surface infrastructure and then was delivered from the surface infrastructure to the receiving facility (e.g., custom treating facility, terminal, pipeline). The reporting must also reflect that brine displaced from the cavern goes to the surface infrastructure and then from the surface infrastructure goes back down the cavern or to another facility, such as an injection facility for a disposal well.

22) The closing inventory for a cavern must cumulatively account for the solids it receives. The lifetime of a cavern, pending operational problems, is often concluded when the volume of accumulated solids approaches the capacity of the cavern.

23) If the received waste contains free liquids, approval holders must verify the oil, water, and solids composition of the waste receipts through sampling or an alternative method accepted in writing by the ERCB. If the received waste consists of solids and no free

liquids, the percentage of oil, water, and solids does not have to be determined, and the receipt volume may be recorded as 100 per cent solids.

- If the associated surface infrastructure does not report the receipt of wastes containing oil, the recovery of oil from caverns will be questioned by the ERCB.

For the March 2009 Waste Plant Submission, opening cavern inventories [INVOP] of water (brine), solids (if any), and oil (if any) will be populated from the closing inventories reported on the February 2009 S-25 Statement.

Each subsequent month's Opening Inventory [INVOP] for oil, water, and solids will be the Closing Inventory [INVCL] from the previous month's Waste Plant Submission. This will be an auto-population function of the Registry.

24) Following a cavern measurement event (e.g., sonar survey), the remaining cavern volume must be assessed. Within three months of the measurement event, appropriate adjustments must be made to the Waste Plant Submission to reflect cavern volumes.

9 Facility Status

25) An OWMF must have a status of *active* in order to report and to use the Waste Plant Submission. Following the direction set out in ERCB *Informational Letter (IL) 98-02: Suspension, Abandonment, Decontamination, and Surface Land Reclamation of Upstream Oil and Gas Facilities*, a facility that has been identified as suspended or abandoned may still report using the Waste Plant Submission. However, the following restrictions apply:

a) An ERCB-suspended OWMF facility is one that has ceased all normal operations pursuant to its approval. The facility may not be rendered incapable of its approved use, but is left in a safe and stable state during its suspended state. A suspended OWMF may only accept freshwater [FSHWTR] to allow for processing of previously received wastes/materials and can continue to deliver oil, water, and solids in order to eliminate inventory prior to abandonment or mothballing (long-term suspension) the facility, or until such time that the facility commences operations again. **OWMF in a suspended state must actively eliminate or reduce on-site inventory and must not accept oilfield or non-oilfield wastes.**

b) An ERCB-abandoned OWMF facility is one that has been permanently dismantled to render it permanently incapable of its approved use. This includes leaving downhole or subsurface structures in a permanently safe and stable condition, in accordance with ERCB requirements; the removal of associated equipment and structures; the removal of all produced liquids; and the removal and appropriate disposal of structural concrete. **Abandoned OWMFs must not receive or dispose materials (oilfield or non-oilfield).** If any contaminated soil or water results during remediation and reclamation of the OWMF, the OWMF is required to report using the Oilfield Waste Disposition report, as outlined in *Directive 030: Digital Data Submission of the Annual Oilfield Waste Disposition Report*.

10 Noncompliances and Fees

The following Waste Plant Submission reporting noncompliances may be subject to the fees identified below:

- A OWMF has an operational status of active for a production month and the required Waste Plant Submission has not been submitted; subject to a fees of $500.00.

- The operator of the facility that the OWMF has delivered to or received from has amended the disposition/receipt volume at the OWMF, and the OWMF approval holder has not accepted the change (pending [DISP]/[REC]); subject to a fees of $100.00.

- The OWMF approval holder amends the closing inventory for a prior month, resulting in a change to the next month's opening inventory, but the change has not been accepted (pending [INVOP]); subject to a fees of $100.00.

- The OWMF is out of balance (i.e., the balance is not 0.0) for a particular product group (i.e., oil, water, or solid); subject to a fees of $100.00.

- The OWMF has an inventory adjustment [INVADJ] for a particular product group (i.e., oil, water, or solid) that is greater than 10 per cent of the total receipts [REC] for the same product group (i.e., oil, water, or solid); subject to a fees of $100.00.

Appendix 1   Glossary

The following abbreviations and terminology are used in this document.

Abandoned facility	The permanent dismantlement of the licensed facility so that it is permanently incapable of its ERCB licensed use. This includes leaving downhole or subsurface structures in a permanently safe and stable condition in accordance with ERCB requirements; the removal of associated equipment and structures; the removal of all produced liquids; and the removal and appropriate disposal of structural concrete (in accordance with *IL 98-02*).
Active facility	Operational status is either active or suspended.
Activity code	As it relates to Waste Plant Submission, includes receipt, disposition, opening and closing inventory, imbalance, inventory adjustment (see Appendix 9).
AENV	Alberta Environment (www.environment.gov.ab.ca).
AENV Approval No.	The first 8 digits of the approval code as assigned to AENV-approved facilities (e.g., 12345678-00-00).
BA code	Business associate code—the unique four-digit code assigned to each corporate entity.
Brine	Saline water displaced from a waste cavern.
[BRKWTR]	Saline water/brackish water (more than 4000 milligrams per litre [mg/L] of total dissolved solids).
Delivery	The transfer of product or waste to an intended destination. The delivery of one facility is the receipt of the corresponding facility.
Disposition	The sum of all deliveries.
DOW	Dangerous oilfield waste, as defined by ERCB *Directive 058: Oilfield Waste Management Requirements for the Upstream Petroleum Industry.*
ERCB	Energy Resources Conservation Board (www.ercb.ca).
Facility ID code	Facility identifier code—a unique facility identification code assigned by the registry to each facility with 4 letters and 7 numbers (e.g., ABWP1234567).
Fluids	The sum of both waste fluid [WASTE] and produced [WATER].
[FSHWTR]	Non-saline water/fresh water (less than 4000 milligrams per litre [mg/L] of total dissolved solids).
Hazardous	See AENV *Waste Control Regulations* and *ID 2000-03: Harmonization of Waste Management*.
Non-DOW	Non-dangerous oilfield waste as defined by *Directive 058*.

Non-hazardous	See AENV *Waste Control Regulations* and *ID 2000-03: Harmonization of Waste Management*.
[NONOFD]	Non-oilfield waste (see *ID 2000-03: Harmonization of Waste Management*).
OGCR	*Oil and Gas Conservation Regulations.*
Oilfield waste	An unwanted substance or mixture of substances that results from the construction, operation, abandonment, or reclamation of a facility, well site, or pipeline, but does not include an unwanted substance or mixture of substances from such a source that is received for storage, treatment, disposal, or recycling at a facility regulated under the *Environmental Protection and Enhancement Act*.
OWMF	Oilfield waste management facility—a facility for the processing, treatment, storage, disposal, or recycling of oilfield waste, the operation of which is approved by the ERCB, including, without limitation, a waste processing facility, a waste storage facility, a waste transfer station, a surface facility associated with a disposal well, a biodegradation facility, an oilfield landfill, and a thermal treatment facility.
Processed waste	Waste that has been subjected to any method, technique, or process designed to change the physical, chemical, or biological character or composition of a substance.
Product code	ERCB product name, represented by a code.
Product group	Oil, water, or solids.
Production month	Reporting month for the Waste Plant Submission with a submission deadline of approximately the 20th day of the following month for the previous reporting month. Submission deadlines are available on the Registry Web site (www.petroleumregistry.gov.ab.ca) and are published on the Bulletin Board in the Registry Reporting Calendar.
Receipt	Receipt of product or waste from another facility. The receipt of one facility is the disposition [DISP] of the corresponding facility.
Registry	Petroleum Registry of Alberta (www.petroleumregistry.gov.ab.ca).
SHUTIN	A facility that is considered active but is not receiving or delivering materials for a given month.
Standalone facility	A facility constructed and operated on its own site.
Suspended facility	The cessation of normal production, operation, or injection activities at a facility pursuant to its ERCB licensed use. The facility need not be rendered permanently incapable of its licensed use, but must be left in a safe and stable state during this period of suspension, as prescribed by the appropriate ERCB regulations and guidelines (in accordance with *IL 98-02*).

UWI	Unique well identifier—the drilling event and legal land location for each well.
[WASTE]	A waste code for oilfield waste.
Waste code	ERCB waste name, represented by a code.
Waste composition	The portion of each product group (i.e., oil, water, and solid) in a given waste stream as established by analysis of the waste.
Waste fluid	An oilfield waste [WASTE].
[WATER]	The product code for produced water, a product recovered in association with the production of oil and/or gas.

Appendix 2   Example of a Blank Waste Plant Submission

Appendix 3   ERCB Waste Codes and Names

ACID	Acid Solutiions (unneutralized)
ACTCRB	Activated Carbon
ASBEST	Asbestos
BATT	Batteries (wet and dry cell)
BLBDWT	Boiler Blowdown Water
BRKWTR	Saline Water/Brackish Water - TDS > 4000 ppm*
CATNS	Catalyst (non-sulphur)
CATSU	Catalyst (sulphur)
CAUS	Caustic Solutions (unneutralized, spent)
CEMENT	Cement (returns dry)
COEMUL	Crude Oil/Condensate Emulsions (residuals after treatment)
CONMAT	Construction and Demolition Material
CORINH	Corrosion Inhibitor/Oxygen Scavenger Solutions
CWATER	Waters Contaminated (leachate, collected surface waters)*
DESICT	Dessicant
DMDS	Dimethyl Disulphide Solutions
DOMWST	Garbage/Domestic Waste
DRWSHC	Drilling Waste Hydrocarbon*
DRWSGC	Drilling Waste Gel Chemical*
DRWSAC	Drilling Waste Advanced Gel Chemical*
EMTCON1	Aerosol Cans*
EMTCON2	Barrels, Pails*
EMTCON3	Crude Oil Sample Bottles*
EMTCON4	Cutting Oil Tubes*
EMTCON5	Grease Cartridges*
EMTCON6	Mud Sacks – Drilling*
EMTCON7	Paint Cans/Brushes*
EMTCON8	Pipe Dope Containers/Brushes*
FILAPC	Filters - Air Pollution Control
FILFWT	Filters - Raw/Fresh Water
FILGLY	Filters Glycol
FILLUB	Filters - Lube Oil (waste type 201)
FILMTH	Filters - Methanol
FILOTH	Filters - Other (raw/fuel gas, NGLs)
FILPWT	Filters - Produced/Process Water
FILSWT	Filters - Gas Sweetening (MEA, DEA, MDEA, sulphinol)
FILWTT	Filters (Media) - Water Treatment
FLBWSW	Filter Backwash Liquids (gas sweetening)
FLBWWT	Filter Backwash Liquids (water treatment)
FRCSND	Frac Sand - Non-Radioactive
FRFLDW	Frac Fluid (water based)*
FRFLDH	Frac Fluid (hydrocarbon based)*
FRFLDR	Frac Fluid Radioactive*
FRMFNS	Residual formation fines after treatment and settlement*
FRSDR	Frac Sand - Radioactive (plus other radioactive diagnostic materials)

FSHWTR	Non-Saline Water/Fresh Water - TDS < 4000 ppm*
GLYC	Glycol Solutions (no heavy metals)
GLYCHM	Glycol Solutions (containing lead or other heavy metals) (waste type 202)
HYDOIL	Hydraulic and Transmission Oil
IEXLIQ	Ion Exchange Resin Regenerant Liquids
IEXRES	Ion Exchange Resin
INCASH	Incinerator Ash
INOCHM	Chemicals (inorganic)
IRNSPG	Iron Sponge
LDDOPE	Lead Based Products (pipe dope/greases)
LDTAPE	Lead Based Products (H_2S sensing tape)
LUBOIL	Lubricating Oil (hydrocarbon and synthetic)
MNFCTR	Manufacture*
METHNL	Hydrotest Fluids - Methanol
NONOFD	Non-Oilfield Waste*
NORM	Naturally Occurring Radioactive Materials - NORMs
OILABS	Absorbants
OILRAG	Rags
ORGCHM	Chemicals (organic)
PCBBAL	Polychlorinated Biphenyls (PCBs) - Fluorescent Light Ballasts
PCBLIQ	Polychlorinated Biphenyls (PCBs) Askarel Liquids
PCBSLI	Polychlorinated Biphenyls (PCBs) - Contaminated Solids > 50 ppm < 1000 ppm
PCBSGI	Polychlorinated Biphenyls (PCBs) - Contaminated Solids > 1000 ppm
PCBSLF	Polychlorinated Biphenyls (PCBs) - Contaminated Solids < 50 ppm
PIGWST	Pigging Waste (liquid and wax)
PSTCON	Pesticide/Herbicide Containers
PSTHRB	Pesticides/Herbicides
PWTRHM	Water - Process (with heavy metals)
PWTROR	Water Process (with organic chemicals)
SALT	Salt Heat Medium
SAND	Sand - Produced
SLGCTW	Sludge - Cooling Tower
SLGEML	Sludge – Emulsion*
SLGGLY	Sludge - Glycol/Gas Drying
SLGHYD	Sludge - Hydrocarbon
SLGLIM	Sludge - Lime
SLGPIT	Sludge - Flare Pit
SLGPRO	Sludge - Process
SLGSUL	Sludge - Sulphur
SLGSWT	Sludge - Gas Sweetening Systems
SMETAL	Metal (scrap)
SOILCH	Contaminated Debris and Soil (chemical/solvent)
SOILCO	Contaminated Debris and Soil (crude oil/condensate)
SOILEM	Contaminated Debris and Soil (emulsion)*
SOILHM	Contaminated Debris and Soil (mercury/metals)
SOILPT	Contaminated Debris and Soil (pesticide/herbicide)
SOILPW	Contaminated Debris and Soil (produced/salt water)

SOILRO	Contaminated Debris and Soil (refined fuels/oils)
SOILSU	Contaminated Debris and Soil (sulphur)
SOLALP	Solvents/Residues (non-halogenated aliphatic)
SOLARO	Solvents/Residues (non-halogenated aromatic)
SOLHAL	Solvents/Residues (halogenated)
SWBFLD	Swabbing Fluid*
SWTLIQ	Sweetening Agents (liquids)
SWTSOL	Sweetening Agents (solids)
THPROT	Thread Protectors - Casing/Tubing
TRTHAY	Treater Hay
WATER	Water - Produced (including brine solutions)
WOODCT	Wood (chemically treated/cooling tower)
WPAINT	Paints
WSHORG	Wash Fluids - Organic
WSHWTR	Wash Fluids - Water
WSTCGS	Waste Compressed or Liquified Gases
WSTCLQ	Waste Corrosive Liquid
WSTCSO	Waste Corrosive Solid
WSTFLQ	Waste Flammable Liquid
WSTFSD	Waste Flammable Solid
WSTMIS	Waste - Miscellaneous
WSTOLQ	Waste Oxidizing Liquid
WSTOSD	Waste Oxidizing Solid
WSTPLQ	Waste Poisonous Liquid
WSTPSD	Waste Poisonous Solid
WSTRDM	Waste Radioactive Material
WWOFLD	Well Workover Fluids

Additional Waste Code list items

WASTE	Special waste code for a waste plant disposing to/receiving from another waste plant or injection facility.*

* A number of new codes have been created to better define the oilfield wastes and provide greater clarity. The new waste codes are identified by an asterisk (*).

Appendix 4   List of Possible Reporting Errors *

Waste Location Errors

Business Name	Validation Rule	Result Type	Message	Error Number
Name	A waste facility/location name must be entered when requesting a new Waste Location Identifier.	ERROR	Waste Location name is required when requesting a new Waste Location Identifier.	WLR001
Description	A waste location description must be entered when requesting a new Waste Location Identifier.	ERROR	Description is required when requesting a new Waste Location Identifier.	WLR002
Legal Exception	Valid values: 00, 02-09, or blank	ERROR	Legal subdivision must be 00, 02-09, or blank.	WLR003
Legal Subdivision	Valid values: 1-16	ERROR	Legal subdivision must be between 1 and 16.	WLR004
Section	Valid values: 1-36	ERROR	Section must be between 1 and 36.	WLR005
Township	Valid values: 1-126	ERROR	Township must be between 1 and 126.	WLR006
Range	Valid values: 1-30	ERROR	Range must be between 1 and 30.	WLR007
Meridian	Valid values: 4,5,6	ERROR	Meridian must be 4, 5, or 6.	WLR008
AB Location	If any of the AB location elements are entered, they must all be correctly supplied.	ERROR	AB Location must be blank or fully completed.	WLR009
Non AB Location	Either 'AB Location' or 'Non AB Location' is entered, not both.	ERROR	Non AB Location must be blank if AB Location is entered.	WLR010
Address	'AB Location,' 'Non AB Location,' or 'Address' must be entered.	ERROR	Location or address must be entered.	WLR011
Start Date	Cannot be greater than current production month, but can be for a prior production period.	ERROR	Start date cannot be in the future.	WLR012

* For more details on error messages, contact the Registry.

Waste Plant Submission Error Report

Data Element Name	Validation Rule	Result Type	Message	Message Number
Facility ID	Must be an 11-digit, alphanumeric identifier (XX XX 9999999).	ERROR	Reported facility ID [value] is not a valid facility in the Registry.	WPR001
Facility ID	First and second characters of id must be AB.	ERROR	Reported facility ID [value] is not a valid facility for waste plant submission. First and second characters of ID must be AB.	WPR002
Facility ID	Must be a valid facility ID in the Registry.	ERROR	Reported facility ID [value] is not a valid facility in the Registry.	WPR001
Facility ID	Third and fourth characters of ID must be one of the reporting facility types (currently WP). This is validated against a database validation table to check that the facility type and subtype are allowed to make a waste plant submission.	ERROR	Reported facility ID [value] is not a valid facility for waste plant submission.	WPR003
Facility ID	This is the generic security error message created when an event arises that is not covered by any of the following security-related error messages.	ERROR	Access is denied for facility ID [value]. Consult your organization's security administrator (USA).	WPR004
Facility ID	Must be a valid facility associated with the BA as per infrastructure for the production year month, or if BA has authority to do prior period amendment.	ERROR	Access denied. You are not identified as the operator of facility [value].	WPR005
Facility ID	Facility operational status must be 'Active' or 'Suspended' to make a waste plant submission. A waste plant with any other status ('Abandoned,' for example) is not allowed to make a waste plant submission. The facility operational status is checked in a database validation table to ensure that the status is allowed to make a waste plant submission.	ERROR	Reported facility ID [value] does not have a valid operational status [value] for waste plant submission.	WPR006
Facility ID	If the facility operator's BA status is 'amalgamated' or 'amalgamated/continued out,' the production month must be less than or equal to the 'established date.'	ERROR	The facility BA [BAId] is no longer valid. It has been amalgamated. The new ID is [New BAId].	WPR007
Facility ID	For on-line and batch submission: Must be a valid facility associated with the user ID as per security.	ERROR	Access denied. You are not authorized for facility [value]. Please consult your organization's security administrator (USA).	WPR008
Production month	Cannot be blank.	ERROR	Production month cannot be blank	WPR009
Production month	Must be a 6-digit numeric field. May be entered as YYYYM, but will be converted to 6 digits.	ERROR	Production month [value] is not valid. Format should be YYYY-MM.	WPR010
Production month	Must be reported as YYYYMM. This means it must be reported with year element first, as 4 digits.	ERROR	Production month [value] is not valid. Format should be YYYY-MM.	WPR010
Production month	Must be a valid date (year month).	ERROR	Production month [value] is not valid. Format should be YYYY-MM.	WPR010

Data Element Name	Validation Rule	Result Type	Message	Message Number
Production month	Must be less than or equal to the current calendar month.	ERROR	Production month [value] is in the future.	WPR011
Production month	If production month is prior to Waste Plant Submission implementation, the Registry will reject the submission.	ERROR	Production month [value] is prior to the implementation of Waste Plant Submissions in the Registry. Contact ERCB for submission procedures.	WPR012
Activity	Cannot be blank.	ERROR	Activity cannot be blank.	WPR013
Activity	The activity must be valid for waste plant reporting (see Appendix 9).	ERROR	Activity [value] is not valid for waste plant reporting.	WPR014
Activity	The combination of activity, waste code, from/to identifier, and N/D flag must be unique for a reporting waste plant facility and production month.	ERROR	Activity [value], waste code [value], from/to identifier [value] and N/D flag [value] have been reported multiple times for this reporting facility and production month.	WPR015
Activity	**Activity INVCL:** Not valid if the submitting waste plant facility in the following production month has a status that is not 'active.'	ERROR	Submitting facility [value] has an operational status of [value] for production month [value]. Therefore INVCL cannot be reported for production month [value].	WPR016
Activity	**Activity INVCL:** Is only valid when waste code field and from/to field are blank.	ERROR	Waste Code and From/To must be blank when Activity is INVCL.	WPR017
Activity	**Activity INVCL:** Not valid if the submitting waste plant facility in the following production month has a SHUTIN activity reported.	ERROR	Submitting facility [value] has a SHUTIN activity present for production month [value]. Activity [value] cannot be reported.	WPR018
Activity	**Activity REC/DISP:** Not valid if the from/to Registry reporting facility in the reported production month has a facility-level SHUTIN activity reported.	ERROR	From/To facility [value] has a facility-level SHUTIN activity present for production month [value]. Activity [value] cannot be reported.	WPR019
Activity	**Activity SHUTIN:** If a waste plant facility has opening inventory (INVOP) reported for the month, activity SHUTIN cannot be reported.	ERROR	Submitting facility [value] has opening inventory reported. Activity [value] cannot be reported.	WPR020
Activity	**Activity SHUTIN:** The submitting waste plant facility cannot report other activity rows when reporting a SHUTIN record. It must be the only record in the submission.	ERROR	Activity [value] cannot be reported, as there are other activities reported.	WPR021
Activity	**Activity SHUTIN:** The submitting waste plant facility cannot report any other column values for a SHUTIN activity. From/To, Waste Code, N/D, Oil, Water, Solids and Gas must be blank.	ERROR	Activity [value] cannot be reported with values in other columns.	WPR022
Waste Code	Must be a valid Waste Code (see Appendix 3).	ERROR	Waste code [value] is not valid.	WPR023
Waste Code	Must be a valid waste code for the activity (see Appendix 9).	ERROR	Waste code [value] is not valid for activity [value].	WPR024

Data Element Name	Validation Rule	Result Type	Message	Message Number
Waste Code	At a 'Suspended' reporting waste plant facility, the only valid waste code for a receipt is FSHWTR.	ERROR	Waste code [value] is not valid for a 'Suspended' waste plant facility.	WPR039
Received From/delivered to ID	**Facility ID**: Must be an 11-character, alphanumeric identifier (XX XX 9999999).	ERROR	From/to facility ID [value] is not a valid facility.	WPR025
Received From/delivered to ID	**Facility ID**: Third and fourth characters of ID must be one of the Registry reporting or non-reporting facility types or must be a waste location (currently WL). (See Appendix 7 for list).	ERROR	From/to facility ID [value] is not a valid facility.	WPR025
Received From/delivered to ID	**Facility ID**: Remaining seven characters must be a valid 7-digit numeric value.	ERROR	From/to facility ID [value] is not a valid facility.	WPR025
Received From/delivered to ID	**Facility ID**: Facility must exist in infrastructure/facility database tables.	ERROR	From/to facility ID [value] is not a valid facility.	WPR025
Received From/delivered to ID	**Facility ID**: Facility must have an 'active' status in infrastructure/facility database tables for the reported production month.	ERROR	From/to facility ID [value] is not an 'active' facility for production month [value].	WPR026
Received From/delivered to ID	**Well ID**: Third and fourth characters of ID must be WI.	ERROR	From/to well ID [value] is not a valid well.	WPR027
Received From/delivered to ID	**Well ID**: Remaining 16 characters must be a valid unique well identifier (UWI).	ERROR	From/to well ID [value] is not a valid well.	WPR027
Received From/delivered to ID	**Well ID**: Well must exist in infrastructure/well database tables.	ERROR	From/to well ID [value] is not a valid well.	WPR027
Received From/delivered to ID	**Well ID**: Well must be a valid unlinked well.	ERROR	From/to well ID [value] must be an 'unlinked' well.	WPR028
Received From/delivered to ID	The from/to must be valid for the activity (see Appendix 7).	ERROR	From/to [value] is not allowed with activity [value].	WPR029
Received From/delivered to ID	Only a valid facility, waste location, or well is allowed. Otherwise, From/To must be blank.	ERROR	From/to [value] is not allowed.	WPR030
Volume	Volume must be a valid numeric value.	ERROR	[value] volume [value] is not numeric.	WPR031
Volume	Volume must be a valid number, maximum 9 digits before the decimal and maximum 1 digit after the decimal place.	ERROR	[value] volume [value] is an invalid format; maximum 9 digits before the decimal and maximum 1 digit after the decimal place.	WPR032
Volume	Volume must be a positive number, with the following exceptions...	ERROR	[value] volume [value] must be a positive number for activity [value].	WPR033
Volume	**Exception 1**: If activity is INVADJ, positive and negative are allowed.	INFORMATION	No error message.	
Volume	Volume column must be blank for certain activities (see Appendix 9).	ERROR	[value] volume must be blank for activity [value].	WPR034

Data Element Name	Validation Rule	Result Type	Message	Message Number
Volume	At least one volume column per row must have a valid non-zero value entered.	ERROR	No volume specified for from/to facility ID [value], activity [value] and waste code [value].	WPR035
Dangerous/Non-dangerous	Cannot be blank when the specified activity is REC.	ERROR	Dangerous/non-dangerous flag cannot be blank for activity REC.	WPR036
Dangerous/Non-dangerous	Must be blank when the specified activity is not REC.	ERROR	Dangerous/non-dangerous value must be blank for activity [value].	WPR037
Dangerous/Non-dangerous	Must be a valid code (either 'N', 'D', or blank).	ERROR	Invalid entry for dangerous/non-dangerous value.	WPR038

Waste Plant Balancing and Missing Error

Error Number	Error Message	Error Description
WPE001	Facility is missing Facility Operational Status = [status].	Facility has an 'active' operational status for the production month, and the required waste plant submission has not been made.
WPE002	Amendment is missing for a prior month Pending activity with no submission [from/to] [waste code] [activity].	The operator of the facility that you delivered to/received from has amended the disposition/receipt volume at your facility, and you have not accepted the change (pending DISP/REC).
WPE003	Amendment is missing for a prior month Pending activity with no submission [activity].	The operator of the facility amends the closing inventory for a prior month. This resulted in a change to the next month's opening inventory, and you have not accepted the change (pending INVOP).
WPE004	Imbalance is other than 0.0 [product group] IMBAL = [volume].	The facility is out of balance (i.e., the balance is not 0.0) for a particular product group.
WPE005	Inventory adjustment exceeds tolerance [product group] INVADJ = [percentage].	The facility has an inventory adjustment (INVADJ) for a particular product group that is greater than 10% of the total receipts (REC) for the same product group.

* For more details on error messages, contact the Registry.

Appendix 5　Sections of the Waste Plant Submission

Facility ID or waste plant facility ID associated with the OWMF. When entered, it will be validated by user and facility type.

Production Month or reporting month is defaulted to the current ERCB production month and year. This field may be changed by overtyping the existing values.

Reference Code is a user-entered code for a specific Waste Plant Submission. The reference code may contain up to 16 characters.

⊘ Menu	✉ Inbox	? Help	👥 Contacts	⊘ Logout	**BA:** 0000 ABC COMPANY LIMITED **Name:** test user		*Quicklist:*	▼

[Monthly Reporting] > [Waste Plant]

Edit Waste Plant Submission

Facility ID: AB WP 0000123   **Location:** 00-02-03-031-04 W5   **Production Month:** 2009-03
Name: AB WASTE PLANT
**Reference Code:** [ ]

Filters:	From/To		Activity		Waste Code	
	ALL	...	ALL	...	ALL	...

[Go]

CME0001 No records found

Del	From/To		Activity		Waste Code		N/D	Oil	Water	Solids	Gas
☐	ABWI102011505606W400	...	REC	...	WWOFLD	...	N	0	625	0	0
☐	ABWI103011505606W402	...	REC	...	WWOFLD	...	N	0	37.5	8	0
☐	ABIF00788299	...	DISP	...	WASTE	...		0	0	5.6	0
☐		...		...		...					
☐		...		...		...					
☐		...		...		...					
☐		...		...		...					
☐		...		...		...					
☐		...		...		...					
☐		...		...		...					
☐		...		...		...					

[Add] [Submit] [Cancel]

Filters include From/To, Activity, and Waste Code, all intended to aid in the refinement or display of information.

Delete (Del) column to be used to check off rows to be deleted.

From/To column is used to select a Registry facility, a waste location, or an unlinked Registry well ID. The ID can be obtained from the look-up list available on the Registry or can be entered directly.

Activity column is used to select an activity (see Appendix 9). The activity can be entered directly or obtained by using the look-up list.

Waste Code column is used to select the ERCB waste code (see Appendix 3). The waste code can be entered directly or obtained by using the look-up list.

N/D column is used to identify the classification of the waste material received or delivered as either non-dangerous (or non-hazardous for non-oilfield wastes) or dangerous (or hazardous for non-oilfield wastes).

Oil, Water, Solids columns are used to enter the composition of the waste material received and the disposition of resulting wastes in cubic metres (m^3) to one decimal place.

Gas column is used for reporting fuel gas, which is reported in thousands of cubic metres ($10^3 m^3$) to one decimal place.

Appendix 6　　Example of a Completed Waste Plant Submission

🛇 Menu	✉ Inbox	? Help	👥 Contacts	🚫 Logout	BA:　0000 ABC COMPANY LIMITED Name:test user		Quicklist:	

[Monthly Reporting] > [Waste Plant]

Edit Waste Plant Submission

Facility ID: AB WP 0000123　Location: 00-02-03-031-04 W5　　　Production Month: 2009-03
Name: AB WASTE PLANT
Reference Code: [＿＿＿＿＿]

Filters:　From/To　　　　　　　　Activity　　　　Waste Code
[ALL ＿＿＿＿＿＿]..　[ALL ＿]..　[ALL ＿]..

[Go]

CME0001 No records found

Del	From/To	Activity	Waste Code	N/D	Oil	Water	Solids	Gas
☐	ABWI102011505606W400 ...	REC ...	WWOFLD ...	N	0	625	0	0
☐	ABWI103011505606W402 ...	REC ...	WWOFLD ...	N	0	37.5	8	0
☐	ABIF00788299 ...	DISP ...	WASTE ...		0	0	56	0
☐	...	...	...					
☐	...	...	...					
☐	...	...	...					
☐	...	...	...					
☐	...	...	...					
☐	...	...	...					
☐	...	...	...					

[Add]　[Submit]　[Cancel]

Appendix 7   Waste Plant Submission Auto-Population (Waste Plant 1)

Activity	From/To	Waste Code	N/D	Oil (m³)	Water (m³)	Solid (m³)	Gas (10³ m³)	Comment
REC	All facility types	Approved waste code	Appropriate classification	yes	yes	yes	no	The waste plant will auto-populate to the facilities.
DISP	IF or WL	WASTE, WATER, BRKWTR, FSHWTR, or MNFCTR	Not required	yes	yes	yes	no	The waste plant will auto-populate the IF or WL.
DISP	Waste plant (2)	WASTE	Not required	yes	yes	yes	no	Waste plant (2) will auto-populate to waste plant (1).
DISP	CT, TM, PL	BLANK	Not required	yes	no	no	no	The CT, TM, PL will auto-populate to the waste plant.
REC	BT, GS, GP	BLANK	Not required	no	no	no	yes	The BT, GS, GP will auto-populate to the waste plant.
REC	All facility types and WI	Approved waste code	Appropriate classification	yes	yes	yes	no	The waste plant will auto-populate to the facility; however, the oil will be reported as oil and the water and solids will be reported as water.

Appendix 8   Waste Plant Submission Summary View

					BA: 0000 ABC COMPANY LIMITED		
Menu	Inbox	Help	Contacts	Logout	Name:test user	*Quicklist:*	

[Monthly Reporting] > [Waste Plant]

Query Waste Plant Submission

Facility ID: AB WP 0000123 [...]   Location: 02-02-15-056-06 W4   Production Month: 2009-03 < >

Name: AB WASTE PLANT   Amendment #: 1 < >

Reference Code: BH128808-05-13   Submitted: 2009-04-20 08:25

ERCB Extracted: 2009-04-21 18:47

View: Summary

Product Group: OIL

Go

Balancing activity	Volume
IMBAL	0.0

Product totals: OIL

Activity	Volume
REC	25.3
DISP	23.3
INVADJ	2.0

Cancel

Appendix 9   Activity Type List

Activity code	Activity name	Description	Waste code	Volume column	Manual or auto-created	From/to facility type allowed
DISP	Disposition		[WASTE], [WATER], [BRKWTR], [FSHWTR] or [MNFCTR]	Oil, water, and solid	Manual or auto-populated activity	IF, WL
FUEL	Fuel	An approval holder will enter FUEL to report volume of gas used for fuel at the OWMF.	Blank	Gas	Manual activity	None allowed
IMBAL	Imbalance	The Registry will enter IMBAL and the imbalance volume to report the difference in measurement between the OWMF inlet (receipts and opening inventory) and deliveries (dispositions, closing inventory, and inventory adjustment).			Auto-created activity	
INVADJ	Inventory adjustment	The OWMF approval holder will enter INVADJ to report gains and losses that cannot be identified by a specific activity and/or production month. If the approval holder knows the cause of the gain or loss, an amendment must be filed.	Blank	Oil, water, and solid	Manual activity	None allowed
INVCL	Closing inventory	The OWMF approval holder will enter INVCL to report the volume held in inventory at the end of the production month. Closing inventory is the total of all oilfield waste materials remaining on site. The Registry will deem the reported closing inventory as the next month's opening inventory.	Blank	Oil, water, and solid	Manual activity	None allowed
INVOP	Opening inventory	The Registry will auto-populate INVOP volume for each product (e.g., oil, water, solid) using the previous month's closing inventory. To correct an opening inventory volume, the approval holder must submit an amendment for the previous month's closing inventory.			Auto-created activity	
REC	Receipt	An OWMF approval holder will enter REC to report a receipt of oilfield or non-oilfield wastes using the appropriate ERCB waste codes. When an OWMF approval holder enters a REC code, it must also enter the facility ID or waste location ID of the delivering location.	All waste codes (blank not valid)	Oil, water, solid, and gas	Manual or auto-populated activity (only gas is auto-populated)	All facilities including the waste locations created by the approval holder
SHUTIN	Shut-in	An OWMF approval holder will enter SHUTIN when a facility has no inventory.	Blank	None allowed	Manual activity	None allowed

Appendix 10 Waste Location ID Screen for Non-Oilfield Waste and Non-ERCB-Regulated Facilities

Appendix 11   Partial List of Waste Location Descriptions*

Biodegradation facility

Biodegradation (on-site)

Car wash sump

Cavern

Class Ia disposal well

Class Ib disposal well

Class II disposal well

Class I landfill

Class II landfill

Class III landfill

Gas/service station

Manufacture

Oilfield waste processing facility

Oil/gas service company

Recycling facility

Refinery

Small oilfield waste incinerator

Storage facility

Swan Hills facility

Tank/truck wash

Thermal treatment

Transfer station

Used oil recycler

* As waste location IDs are created, they will be added to the list established in the Registry.

Appendix 12   Waste Location ID Screen Confirmation

[Infrastructure] > [Facility Infrastructure] > [Setup/Maintenance]

Waste Location ID Confirmation

Your request has been successfully processed. An identifier has been generated for the new waste location.

Waste Location ID: AB WL 0001234   **Start Date:** 2009-03

                                             End Date:

Name: Service Station corner of 37th Street and 16th Avenue

Description: Service Station

Approval Number:

AB Location:	LE	LSD	SEC	TWP	RGE	M
	00	01	05	16	24	W 4

Non AB Location:

Status: Active

Address: 1601 37th Street

City: Brooks

Province: ALBERTA

Postal Code: T5X 1Q8

[OK]